

### DETAILED ACTION

1. Claim 111 is objected to because of the following informalities: currently claim 111 appears to depend from the canceled claim 87. Appropriate correction is required.
2. Claim 107 objected to because of the following informalities: “*wherein the shape of a rear of said penetrating core*” is a redundant duplicate of the language following immediately afterwards. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 89-106 and 108-125, are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a partial fragmenting projectile comprising or consisting of a penetrating core arranged in front of the fragmenting core, with both the penetrating core and the fragmenting cores being **completely surrounded by the projectile jacket lying entirely on the periphery of the projectile**, does not reasonably provide enablement for a projectile in which the fragmenting core and the penetrating core are not completely surrounded by the projectile jacket lying entirely on the periphery of the projectile). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. The

specification makes it quite clear that the jacket covering the entire periphery of the projectile is a critical feature of this invention (see at least Fig. 1 and supporting sections of the specification), and without the jacket being so arranged, the claimed projectile would not work as disclosed and is beyond the scope of the disclosed invention. At least pages 8-10 of the specification outline many critical structural details that enable the projectile of Fig. 1 to function as intended –see also the Interview Summary mailed 7/23/2007.

5. Claims 89-106, 108-125 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a partial fragmenting projectile in which **the penetrating core is made of a material that is harder than that of the fragmenting core**, does not reasonably provide enablement for a penetrating core that is made of a material that has the same hardness or is of lesser hardness than the material of the fragmenting core. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. A projectile comprising a penetrating core being made from a material that is of the same or lesser hardness than the fragmenting core, has not disclosed in the specification and would not work as disclosed and is beyond the scope of the disclosed invention.

6. Claims 89-101, 103-106, 107, 108, 109,110, 111, 112-123, and 125 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a partial fragmenting projectile that **comprises a crimping forming a sharp edge in the jacket at a point between the penetrating core and the fragmenting core**, the

**sharp edge acting as a predetermined breaking point for partial fragmenting of the fragmenting core**, does not reasonably provide enablement for a projectile that does not comprise such a sharp edge in the jacket formed by a crimp in the jacket at a point between the penetrating core and the fragmenting core. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The specification has not disclosed an embodiment of the projectile that does not comprise a sharp edge in the jacket formed by a crimp in the jacket at a point between the penetrating core and the fragmenting core. Without such a sharp edge in the jacket, the partial fragmentation projectile would not work as disclosed and is beyond the scope of the disclosed invention.

7. Claims 89-119, and 121-125 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for **the partial fragmenting projectile comprising a cavity/ recess positioned in the front of the fragmenting core into which the rear end of the penetrating core is wedged**, does not reasonably provide enablement for any other arrangement of the penetrating and fragmenting cores. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The specification has not disclosed any other arrangement of the penetrating and fragmenting cores other than one in which the rear end of the penetrating core is wedged into a recess/cavity in the front of the fragmenting core.

Without such an arrangement, the partial fragmenting projectile would not function as disclosed, and is beyond the scope of the disclosed invention.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 107 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 107, line 9, "the recess" lacks a proper antecedent basis.

In claim 107, line 10, "the nose" lacks a proper antecedent basis.

In claim 107, lines 11, 12, "*the front of the fragmenting projectile*" should likely be replaced by the front of the fragmenting core, which more accurately describes the invention.

10. Claims 89-125 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: 1) a crimping forming a sharp edge in the jacket at a point between the penetrating core and the fragmenting core; 2) the penetrating core and the fragmenting cores being completely surrounded by the projectile jacket lying entirely on the periphery of the projectile; 3) the partial fragmenting projectile comprising a cavity/ recess positioned in the front of the fragmenting core.

11. Claims 89-119, and 121-125 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the partial fragmenting projectile comprising a cavity/ recess positioned in the front of the fragmenting core into which the rear end of the penetrating core is wedged.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

13. Claims 89-92, 96, 98, 105, 109, and 112-120, are rejected under 35 U.S.C. 102(a) as being clearly anticipated by WO 99/10703 (SCHWEIZERISCHE EIDGENOSSENSCHAFT – Hug et al. (note US 6,374,743 B1 (Hug et al.) is a member of the same patent family). – WO 99/10703 was previously cited by a previous examiner and listed on the International Search report of parent application PCT/EP00/05656).

14. Hug et al. disclose the invention substantially as claimed. See especially Figs. 1 & 2 and the supporting sections of the specification; penetrating hard core 5, wedged into fragmenting soft core 8; surrounding jacket 3. It is inherent that soft core 8 partially fragments at least to some degree upon contact of the projectile with a target.

***Conclusion***

15. The examiner thanks the applicants for providing copies of DE 113370 & EP 0 225 532 that were listed on the International Search Report of parent application PCT/EP00/05656. The examiner further requests that copies of GB 22505 (Hoxie); and DE 1910181 C (BEHR) also be provided to assist the examiner.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Bergin whose telephone number is 571-272-6872. The examiner can normally be reached on Monday - Wednesday and Friday, 8.30 - 5.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/James S. Bergin/

Primary Examiner, Art Unit 3641

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